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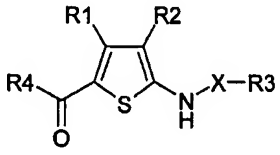
(54) Title: 5-AMINO-2-CARBONYLTHIOPHENE DERIVATIVES FOR USE AS P38 MAP KINASE INHIBITORS IN THE TREATMENT OF INFLAMMATORY DISEASES



(I)

(57) Abstract: The invention provides the use of a compound for the manufacture of a medicament for the prophylaxis or treatment of a disease state or condition mediated by a p38 MAP kinase; the compound being defined by formula (I): wherein: R^1 and R^2 are the same or different and each is selected from hydrogen, C_{1-4} hydrocarbyl, halogen and cyano; X is selected from C=O, C=S, C(=O)NH, C(=S)NH, C(=O)O, C(=O)S, C(=S)O and C(=S)S; R^3 is selected from aryl and heteroaryl groups each having from 5 to 12 ring members, the aryl and heteroaryl groups each being unsubstituted or substituted by one or more substituent groups R^7 selected from halogen, hydroxy, trifluoromethyl, cyano, nitro, carboxy, amino, carbocyclic and heterocyclic groups having from 3 to 12 ring members; a group R^a-R^b wherein R^a is a bond, 0, CO, $X^1C(X^2)$, $C(X^2)X^1$, $X^1C(X^2)X^1$, S, SO, SO_2, NR^c, SO_2NR^c or NR^cSO_2; and R^b is selected from hydrogen, carbocyclic and heterocyclic groups having from 3 to 7 ring members, and a C_{1-8} hydrocarbyl group optionally substituted by one or more substituents selected from hydroxy, oxo, halogen, cyano, nitro, amino, mono- or di-C_{1-4} hydrocarbylamino, carbocyclic and heterocyclic groups having from 3 to 12 ring members and wherein one or more carbon atoms of the C_{1-8} hydrocarbyl group may optionally be replaced by 0, S, SO, SO_2, NR^c, $X^1C(X^2)$, $C(X^2)X^1$ or $X^1C(X^2)X^1$; X^1 is 0, S or NR^c and X^2 is =0, =S or $=NR^c$; R^c is hydrogen or C_{1-4} hydrocarbyl; R^4 is a group YR^5 or a group R^6; Y is is NH, 0 or S; R^5 is selected from (a) carbocyclic and heterocyclic groups having from 3 to 12 ring members; and (b) C_{1-8} hydrocarbyl groups optionally substituted by one or more substituents selected from hydroxy, oxo, halogen, cyano, amino, mono- or di- C_{1-4} hydrocarbylamino, and carbocyclic and heterocyclic groups having from 3 to 12 ring members, wherein one or more carbon atoms of the C_{1-8} hydrocarbyl group may optionally be replaced by 0, S, SO, SO_2, NR^c, $X^1C(X^2)$, $C(X^2)X^1$ or $X^1C(X^2)X^1$, provided that when Y is 0, a carbon atom adjacent to the group Y is not replaced by 0; and R^6 is a heterocyclic group having from 4 to 12 ring members and containing at least one ring nitrogen atom through which R^6 is linked to the adjacent carbonyl group; wherein the carbocyclic and heterocyclic groups of substituents R^5 and R^6 are each unsubstituted or substituted by one or more substituent groups R^7 as hereinbefore defined. Also provided are novel compounds, pharmaceutical compositions containing the compounds and methods for their preparation.

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